

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

ORDER NO. 5-00-120

NPDES NO. CA0083313

WASTE DISCHARGE REQUIREMENTS  
FOR

CITY OF ANTIOCH  
CITY OF BRENTWOOD

CITY OF OAKLEY  
CONTRA COSTA COUNTY

CONTRA COSTA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

CONTRA COSTA CLEAN WATER PROGRAM  
STORM WATER DISCHARGES FROM MUNICIPAL  
SEPARATE STORM SEWER SYSTEM  
CONTRA COSTA COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Board) finds that:

1. The County of Contra Costa, Contra Costa County Flood Control and Water Conservation District, the cities of Antioch, Brentwood and Oakley (hereafter collectively referred to as Dischargers) and 16 other incorporated cities within the jurisdiction of Contra Costa County, have jointly formed the Contra Costa Clean Water Program (hereafter Program). On behalf of the Dischargers, the Program submitted a report of waste discharge application on 30 June 1998 for reissuance of the waste discharge requirements under the National Pollutant Discharge Elimination System (NPDES) area-wide municipal storm water permit to discharge storm water runoff from storm drains and watercourses within the jurisdiction of the Dischargers and to implement a Storm Water Management Plan (hereafter Plan) for the Contra Costa Clean Water Program. On 01 February 2000, the City of Oakley submitted a letter to the Board indicating its intent to join the Program and as a result, is named as one of the Dischargers under this permit.
2. The Dischargers are currently covered under the NPDES area-wide municipal storm water permit, Order No. 94-001 (NPDES No. CA008297) adopted on 28 January 1994 with the exception of the City of Oakley, which is covered under the Contra Costa County storm water program.
3. The incorporated cities of Antioch, Brentwood and Oakley (hereafter Cities), Contra Costa County (hereafter County), and the Contra Costa County Flood Control and Water Conservation District (hereafter District) are referred to separately as Permittees and jointly as Dischargers. The Dischargers entered into an Agency Participation and Cost Payment Agreement on 1 April 1998.

WASTE DISCHARGE REQUIREMENTS ORDER NO. 5-00-120  
STORM WATER DISCHARGES FROM MUNICIPAL SEPARATE STORM SEWER SYSTEM  
CONTRA COSTA COUNTY CLEAN WATER PROGRAM  
CONTRA COSTA COUNTY

2

4. The portion of the unincorporated urbanized area within the County is defined as medium municipality [population greater than 100,000 but less than 250,000 in Appendix I to Part 122 of Title 40 of the federal Code of Regulations (40 CFR)]. As such, the County must obtain an NPDES municipal permit for storm water discharges associated with its urbanized areas.
5. The District owns and operates major storm water conveyance basins that service the urbanized area throughout the County. In accordance with 40 CFR Part 122.26(b)(7)(iii), the District is designated as a part of the medium municipal separate storm sewer system.
6. The Cities are considered urbanized areas with population of less than 100,000. Due to their proximity to the urbanized area of the County, their physical interconnections to the District's storm sewer system, and the location of their discharges relative to the District's system, the Cities are designated as part of the medium municipal separate storm sewer system [40 CFR Part 122.26(b)(7)(iii)].
7. Most of the City of Pittsburg falls within the jurisdiction of the San Francisco Bay Regional Water Quality Control Board (SFBRB). Although small portions of the urbanized area of the City of Pittsburg fall within the jurisdictional boundary of the Board (see Attachment A), the City of Pittsburg will refer to Order No. 99-058 (NPDES No. CAS0029912) adopted by the SFBRB on 21 July 1999 for the purpose of implementing its storm water program in those areas, and will not be named as a Discharger to this Order.
8. The Dischargers have jurisdiction over and/or maintenance responsibility for their respective municipal separate storm drain systems and/or watercourses that they own and/or operate in Contra Costa County. The discharge consists of the surface runoff generated from various land uses in all the hydrologic sub-basins, which discharge into watercourses, which in turn flow into Sacramento-San Joaquin Delta (see Attachment B – Delta Waterways). The quality and quantity of these discharges vary considerably and are affected by hydrology, geology, land use, season, and sequence and duration of hydrologic events. Pollutants of concern in these discharges are: certain heavy metals; excessive rates of sediment production to stream channels due to anthropogenic activities; petroleum hydrocarbons from sources such as used motor oil; microbial pathogens of domestic sewage spills and from illicit discharges, certain pesticides which may be associated with the risk of acute and chronic aquatic toxicity; excessive nutrient loads, which cause or contribute to the depletion of dissolved oxygen and/or toxic conditions in the receiving water.
9. The Cities are mostly composed of residential communities with approximately 10% of their land developed as commercial and/or industrial use. With the current construction development, the Cities continue to experience brisk residential growth. Because the majority of the existing and new development is for residential land use, the Cities continue to focus their resources in reducing non-storm water discharges from residential areas.

STORM WATER DISCHARGES FROM MUNICIPAL SEPARATE STORM SEWER SYSTEM  
CONTRA COSTA COUNTY CLEAN WATER PROGRAM  
CONTRA COSTA COUNTY

10. The County and portions of the Cities are composed of mainly agricultural, rural and open space land uses. It is not the intent of the federal storm water regulations to regulate storm water discharges from land uses of these types. Therefore, these areas of the County and Cities are exempt from the requirements of this permit.
11. Section 402(p) of the Clean Water Act (CWA) as amended by the Water Quality Act of 1987 (WQA), requires NPDES permits for storm water discharges from separate municipal storm drain systems, storm water discharges associated with industrial activity (including construction activities) and prohibits non-storm water discharges into these systems. On 16 November 1990, the U.S. Environmental Protection Agency (U.S. EPA) published regulations for storm water discharges pursuant to section 402(p) of the CWA.
12. The application requirements that the Board has determined to be applicable to the Dischargers include submittal of a Storm Water Management Plan (Plan) to reduce the discharge of pollutants in storm water to the maximum extent practicable, and to effectively prohibit non-storm water discharges into municipal storm drain systems and watercourses within the Discharger's jurisdiction that they own and/or operate.
13. The Plan describes the framework for management of storm water discharges during the term of this permit. The title page and table of contents are attached to this Order. The Plan describes that Program's goals and objectives, legal authorities, management structure, funding, the annual reporting and program evaluations process, approach to watershed management and monitoring, and Performance Standards. The chapters of the Plan include the following elements:
  - a) Program Management;
  - b) New Development and Construction Controls;
  - c) Public Information and Industrial Outreach;
  - d) Municipal Maintenance Activities;
  - e) Inspection Activities;
  - f) Illicit Discharge Control Activities;
  - g) Monitoring and Special Studies; and
  - h) Watershed Management Activities.
14. The Plan and modifications or revisions to the Plan that are approved in accordance with Provision D.10 and D.11 of this Order, and the annual format to be submitted in accordance with the Plan and Provision D.5 of this Order are an integral and enforceable component of this Order.
15. Performance Standards represent the minimum level of efforts required of each Discharger in the implementation of Best Management Practices (BMPs) as described in the Plan. The specification of Performance Standards as BMPs also simplifies the task of determining if a Discharger is putting forth a level of effort, which will control pollutants in storm water discharges to the maximum extent practicable.

STORM WATER DISCHARGES FROM MUNICIPAL SEPARATE STORM SEWER SYSTEM  
CONTRA COSTA COUNTY CLEAN WATER PROGRAM  
CONTRA COSTA COUNTY

16. Each of the Dischargers is individually responsible for adopting and enforcing local ordinances necessary to implement effective BMPs to prevent or reduce pollutants in storm water, and providing funds for capital, operation, and maintenance expenditures necessary to implement such BMPs for the storm drain system that it owns and/or operates. Assigned BMPs to be implemented by each Discharger are listed as Performance Standards in the Plan. Enforcement actions concerning this Order will, whenever necessary, be pursued only against the individual Discharger(s) responsible for specific violations of this Order.
17. The State Water Resources Control Board (State Board) has issued NPDES General Permits for the regulation of storm water discharges associated with industrial activities (including construction activities). To effectively implement the industrial, new development and construction elements of the Plan, the Discharger may conduct regulatory activities at industries or construction sites currently covered by the State NPDES General Permits. Under the CWA, the Dischargers cannot enforce the State NPDES General Permits. However, Board staff intends to work cooperatively with the Dischargers to ensure consistency in the implementation of the Plan and in compliance with the requirements of the General Permits.
18. It is the Board's intent that this Order shall ensure attainment of applicable water quality objectives and protection of beneficial uses of receiving waters. This Order, therefore, includes requirements to the effect that discharges shall not cause or contribute to violations of water quality objectives nor shall they cause certain conditions to occur, which create a condition of nuisance or water quality impairment in receiving waters. Accordingly, the Board is requiring that these requirements be addressed through the effective implementation of BMPs to reduce pollutants in storm water as provided in Provisions D.1 through D.13 of this Order.
19. The Board considers the Plan to be equivalent to a watershed management plan for the urbanized portions of Contra Costa County, as the Plan outlines effective and efficient implementation of appropriate BMPs for the most important sources of pollutants within the watersheds. In addition, this Order will phase in additions to the Dischargers' storm water pollution prevention activities that will address excessive rates of sediment production to stream channels by conducting a creek inventory in Contra Costa County as specified in Provision D.8 of this Order.
20. Federal, state, regional or local entities within the Dischargers' boundaries, not currently named in this Order, operate storm drain facilities and/or discharge storm water to the storm drains and watercourses covered by this Order. The Dischargers may lack legal jurisdiction over these entities under the state and federal regulations. Consequently, the Board recognizes that the Dischargers should not be held responsible for such facilities and/or discharges. Caltrans is a state agency that is currently designated as one of the entities. On 15 July 1999, the State Board issued a separate NPDES storm water permit to Caltrans, NPDES No. CAS000003 (Order No. 99-06-DWQ). The State Board may consider issuing separate NPDES storm water permits to other federal, state or regional entities operating within the County's boundaries that may not be subject to direct regulation by the Discharger. Federal agencies are not subject to municipal storm water requirements although they may be permitted as industrial Dischargers.

WASTE DISCHARGE REQUIREMENTS ORDER NO. 5-00-120  
STORM WATER DISCHARGES FROM MUNICIPAL SEPARATE STORM SEWER SYSTEM  
CONTRA COSTA COUNTY CLEAN WATER PROGRAM  
CONTRA COSTA COUNTY

5

21. The Board adopted a Water Quality Control Plan, Fourth Edition, for the Sacramento and San Joaquin River Basin (hereafter Basin Plan), which contains water quality objectives for waters of the Basin. These requirements implement the Basin Plan.
22. The beneficial uses of the Delta downstream of the discharge are municipal and domestic, industrial, and agricultural supply; water contact and non-contact recreation; aesthetic enjoyment; navigation; ground water recharge, fresh water replenishment; and preservation and enhancement of fish, wildlife and other aquatic resources.
23. Urban storm water runoff discharges could contain pollutants that may lower the quality of receiving waters and impact beneficial uses of the Delta. Studies indicate there may be increases in pollutant levels and aquatic toxicity in receiving waters as a result of urban storm water discharges.
24. This Order requires evaluation of existing water quality impacts from urban storm water runoff discharges, and the implementation and evaluation of the Plan to reduce the discharge of pollutants into storm water runoff to the maximum extent practicable (MEP) and to improve water quality and protect beneficial uses. Implementation of the Plan and programs to reduce pollutant loads from industrial and construction sites, new developments and existing urbanized areas are required as part of this Order. Additionally, this Order requires that the effectiveness of the Plan and programs in reducing the discharge of pollutants, attaining water quality objectives and protecting beneficial uses be evaluated.
25. The permitted discharge is consistent with the anti-degradation provisions of 40CFR 131.12 and the State Board Resolution 68-16. This Order provides for an increase in storm water discharge due to the current growth of residential development in the area. The potential increase of pollutant discharge in storm water from these sources will be included in the review and implementation of the Plan.
26. This Order requires implementation of programs (i.e., BMPs) to reduce the level of pollutants in storm water discharges. However, given the continuing development within the area, it is possible that future degradation in water quality could occur. Any such change in water quality will not unreasonably affect the present and anticipated beneficial uses of water and will not result in water quality less than that prescribed in policies of the State Board. The programs required pursuant to this order constitute the best practicable treatment or control of discharges necessary to ensure that any pollution or nuisance will not occur and the highest quality consistent with maximum benefit to people of the State will be maintained.
27. The Board considers storm water discharges from the urban and developing areas in the Contra Costa County to be significant sources of pollutants. Under the Clean Water Act Section 303(d)

WASTE DISCHARGE REQUIREMENTS ORDER NO. 5-00-120  
STORM WATER DISCHARGES FROM MUNICIPAL SEPARATE STORM SEWER SYSTEM  
CONTRA COSTA COUNTY CLEAN WATER PROGRAM  
CONTRA COSTA COUNTY

6

list, the following constituents are listed as pollutants causing impairment of the Delta waterways: mercury; unknown toxicity; diazinon; chlorpyrifos; Group A pesticides<sup>1</sup>, and DDT.

28. It is not feasible at this time to establish numeric effluent limits for pollutants in storm water discharges from municipal storm sewer systems. Therefore, the effluent limitations in the Order are narrative, and include the requirement to reduce pollutants in storm water discharges to the MEP. This Order requires the implementation of BMPs, identified in the Plan to control and abate the discharge of pollutants in storm water discharges. Implementation of BMPs in accordance with the Plan and its schedule constitutes compliance with MEP requirements, and with requirements to achieve water quality objectives.
29. It is not feasible at this time to establish numeric effluent limits for pollutants in non-storm water discharges from facilities owned or operated by the Dischargers. Therefore, the effluent limitations in the Order are narrative, and include the requirement to reduce pollutants in non-storm water discharges through implementation of Best Available Technology (BAT) and Best Conventional Technologies (BCT). Until such time that effluent limits are developed, implementation of BMPs both structural and non-structural, constitute compliance with BAT/BCT effluent limitations standards.
30. The Regulations require that the Plan be implemented during the entire duration of the Permit (40CFR 122-26(d)(2)(iv)), which is 5 years. Within this permit period, the Dischargers shall demonstrate substantial compliance with the Plan and this Order through the information and data supplied in the annual report.
31. The action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Division 13 of the Public Resources Code, Chapter 3, Section 21100, et. seq.) in accordance with Section 13389 of the California Water Code.
32. The Board will notify interested agencies and persons of submitted reports, work plans, Performance Standards, and the Plan, and will provide them with an opportunity for a public hearing and/or opportunity to submit written views and recommendations. The Board will consider all comments and may modify the reports, plans, or schedules or may modify this Order in accordance with the NPDES permit regulations. All submittals required by this Order conditioned with acceptance by the Executive Officer will be subject to these notifications, comment, and public hearing procedures.
33. The Board has notified the Dischargers, and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

---

<sup>1</sup> Group A pesticides are: aldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, hexachlorocyclohexane (including lindane), endosulfan, and toxapheneldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, hexachlorocyclohexane (including lindane), endosulfan, and toxaphene.

WASTE DISCHARGE REQUIREMENTS ORDER NO. 5-00-120  
STORM WATER DISCHARGES FROM MUNICIPAL SEPARATE STORM SEWER SYSTEM  
CONTRA COSTA COUNTY CLEAN WATER PROGRAM  
CONTRA COSTA COUNTY

7

34. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.
35. This Order serves as an NPDES permit, pursuant to Section 402 of the CWA, and amendments thereto, and shall take effect upon the date of hearing, provided that U.S. EPA has no objections.

**IT IS HEREBY ORDERED** that Order No. 94-001 is rescinded, and that the Dischargers, their agents, successors and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

**A. Discharge Prohibitions**

1. The Dischargers shall, within their respective jurisdictions, effectively prohibit the discharge of non-storm water (materials other than storm water) into their storm drain systems and watercourses that they own and/or operate. NPDES permitted discharges are exempt from this prohibition. Non-polluted discharges are also exempt from this prohibition. Some examples of non-polluted discharges are landscape irrigation runoff that is not polluted with silt, fertilizer, herbicides or pesticides, non-polluted groundwater pumped discharge and once-through non-contact cooling water which has no chlorine residual. Compliance with this prohibition shall be demonstrated in accordance with Provision D.9 of this Order. Provision D.9 describes a tiered categorization of non-storm water discharges based on its potential for pollutant content.
2. The discharge of storm water from a facility or any activity that causes or contributes to a violation of the Receiving Water Limitations is prohibited.

**B. Effluent Limitations**

1. The Dischargers shall reduce or eliminate the discharge of pollutants from municipal separate storm sewers to the maximum extent practicable.
2. Discharges of pollutants in non-storm water discharges that cannot be eliminated shall be reduced or minimized through the implementation of Best Available Technologies Economically Achievable for toxic and non-conventional pollutants, and Best Conventional Control Technologies for conventional pollutants.

**C. Receiving Water Limitations**

1. Receiving water limitations are site-specific interpretations of water quality standards from applicable water quality control plans. As such they are required as part of the permit. However, a receiving water condition not in conformance with the limitation is not necessarily a violation of this Order. The Board may require an investigation to determine cause and culpability prior to asserting a violation has occurred.

WASTE DISCHARGE REQUIREMENTS ORDER NO. 5-00-120  
STORM WATER DISCHARGES FROM MUNICIPAL SEPARATE STORM SEWER SYSTEM  
CONTRA COSTA COUNTY CLEAN WATER PROGRAM  
CONTRA COSTA COUNTY

8

The discharge shall not cause the following in the receiving water:

- a. Concentrations of dissolved oxygen to fall below 7.0 mg/l.
- b. Oils, greases, waxes, or other materials to form a visible film or coating on the water surface or on the stream bottom.
- c. Oils, greases, waxes, floating material (liquids, solids, foams, and scums) or suspended material to create a nuisance or adversely affect beneficial uses.
- d. Chlorine to be detected in the receiving water in concentrations equal or greater than 0.01 mg/l.
- e. Aesthetically undesirable discoloration.
- f. Fungi, slimes, or other objectionable growths.
- g. The 30-day average for turbidity to increase as follows:
  - (1) More than 1 Nephelometric Turbidity Units (NTUs) where natural turbidity is between 0 and 5 NTUs.
  - (2) More than 20 percent where natural turbidity is between 5 and 50 NTUs.
  - (3) More than 10 NTUs where natural turbidity is between 50 and 100 NTUs.
  - (4) More than 10 percent where natural turbidity is greater than 100 NTUs.
  - (5) The normal ambient pH to fall below 6.5, exceed 8.5, or change by more than 0.5 unit.
  - (6) Deposition of material that causes nuisance or adversely affects beneficial uses.
  - (7) Taste or odor-producing substances to impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin or to cause nuisance or adversely affect beneficial uses.
  - (8) Radionuclides to be present in concentrations that exceed maximum contaminant levels specified in the California Code of Regulations, Title 22; that harm human, plant, animal or aquatic life; or that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.



WASTE DISCHARGE REQUIREMENTS ORDER NO. 5-00-120  
STORM WATER DISCHARGES FROM MUNICIPAL SEPARATE STORM SEWER SYSTEM  
CONTRA COSTA COUNTY CLEAN WATER PROGRAM  
CONTRA COSTA COUNTY

9

- (9) Aquatic communities and populations, including vertebrate, invertebrate, and plant species, to be degraded.
  - (10) Toxic pollutants to be present in the water column, sediments, or biota in concentrations that adversely affect beneficial uses; that produce detrimental response in human, plant, animal, or aquatic life; or that bioaccumulate in aquatic resources at levels which are harmful to human health.
  - (11) Violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board pursuant to the CWA and regulations adopted thereunder.
2. The discharge shall not cause or contribute to a violation of any applicable water quality standard for receiving waters contained in the Basin Plan. If different applicable water quality standards are adopted after the date of adoption of this Order, the Board may revise and modify this Order as appropriate.

**D. Provisions**

1. The Dischargers shall comply with discharge Prohibition A.2 and Receiving Water Limitations C.1 and C.2 through the timely implementation of control measures and other actions to reduce pollutants in the discharge in accordance with the Plan and other requirements of this permit including any modifications or amendments developed pursuant to this Order. The Plan shall be designed to achieve compliance with Receiving Water Limitations C.1 and C.2. If exceedance(s) of water quality objectives persist, notwithstanding implementation of the Plan, a Discharger shall assure compliance with Discharge Prohibition A.2 and Receiving Water Limitations C.1 and C.2 by complying with the following procedure:
  - a. Upon a determination by either the Discharger(s) or the Board that discharges are causing or contributing to an exceedance of an applicable Water Quality Standards (WQS), the Discharger(s) shall promptly notify and thereafter submit a report to the Board that describes BMPs that are currently being implemented and additional BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedance of WQS. The report may be incorporated in the annual update to the Plan unless the Board directs an earlier submittal. The report shall include an implementation schedule. The Board may require modifications to the report;
  - b. Submit any modifications to the report required by the Board within 30 days of notification;
  - c. Within 30 days following approval of the report described above by the Board, the Dischargers shall revise that Plan and monitoring program to incorporate the approved

WASTE DISCHARGE REQUIREMENTS ORDER NO. 5-00-120  
STORM WATER DISCHARGES FROM MUNICIPAL SEPARATE STORM SEWER SYSTEM  
CONTRA COSTA COUNTY CLEAN WATER PROGRAM  
CONTRA COSTA COUNTY

10

modified control measures that have been and will be implemented, the implementation schedule, and any additional monitoring required;

- d. Implement the revised Plan and monitoring program in accordance with the approved schedule.

So long as Dischargers have complied with the procedures set forth above and are implementing the revised Plan, they do not have to repeat the same procedure for continuing or recurring exceedances of the same receiving water limitations unless directed by the Board to develop additional BMPs.

2. In accordance with Provision D.1 and Finding 27, the Dischargers shall submit a technical report acceptable to the Executive Officer on exceedances of WQS for mercury, unknown toxicity, diazinon, chlorpyrifos, Group A pesticides<sup>2</sup>, and DDT. A draft scope of work, report outline, and budget for the report(s) shall be submitted by 1 November 2000. An interim draft report shall be submitted by 1 April 2001, and a final report shall be submitted by 1 September 2001. The reports shall include, but need not be limited to, the following:
  - a. Identification of potential sources for pollutants of concern that are found in storm water discharges;
  - b. Evaluation of effectiveness of BMPs that are currently being implemented and additional BMPs that will be implemented to prevent or reduce the above listed pollutants that are causing or contributing to the exceedance of WQS;
  - c. Characterization of representative drainage areas and storm water discharges, including land-use characteristics, pollutant concentrations and forms;
  - d. A control measures plan for pollutants listed above that is acceptable to the Executive Officer, which assigns responsibilities and establishes time schedules to implement pollutant reduction and control measures beginning no later than 1 July 2001. Upon approval by the Executive Officer, the revised control measures plan shall be incorporated into the Storm Water Management Plan.
3. **Storm water Management Plan:** The Dischargers shall implement BMPs referred to as Performance Standards in the Plan (see Attachment C – Table of Contents), to reduce pollutants in storm water discharges to the maximum extent practicable. The Plan shall serve as the framework for identification, assignment, and implementation of BMPs. The Dischargers shall begin implementing forthwith the Plan and shall subsequently demonstrate its effectiveness and provide for necessary and appropriate revisions, modifications, and

---

<sup>2</sup> Group A pesticides are: aldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, hexachlorocyclohexane (including lindane), endosulfan, and toxapheneldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, hexachlorocyclohexane (including lindane), endosulfan, and toxaphene.

improvements to reduce pollutants in storm water discharges to the maximum extent practicable and as required by Provisions D.1 through D.13 of this Order.

4. **Performance Standards:** The Plan incorporates Performance Standards developed by the Dischargers. Performance Standards also referred to as BMPs, are intended to define the level of implementation necessary to demonstrate the reduction of pollutants in storm water to the maximum extent practicable. Through a continuous improvement process, the dischargers will modify and improve current performance standards, as needed, to achieve reduction of pollutants in storm water to the maximum extent practicable.
5. **Annual Reports:** The Dischargers shall submit an annual report by 1 September documenting the status of the Program's and the Dischargers' activities during the previous fiscal year, including the results of a qualitative field level assessment of activities implemented by the Dischargers, and the performance of tasks contained in the Plan. The annual report shall include a compilation of deliverables and milestones completed as described in the Plan. In each annual report, the Dischargers may propose pertinent updates, improvements, or revisions to the Plan, which shall be complied with under this Order unless disapproved by the Executive Officer or acted upon in accordance with Provision D.10. As part of the annual report preparation process, each of the Dischargers shall conduct an overall evaluation of the effectiveness of its applicable activities described in the Plan. Direct and indirect measures of effectiveness may include, but are not limited to, conformance with established Performance Standards, quantitative monitoring to assess the effectiveness of BMPs, measurements of estimates of pollutant load reductions, detailed accounting of Program accomplishments, funds expended, and staff hours utilized. Methods to improve effectiveness in the implementation of tasks and activities, including development of new, or modifications of existing Performance Standards shall be identified where appropriate.
6. The Dischargers shall submit an annual report format by 1 April of each year for the annual report due on 1 September. The annual report format for Program agencies shall contain work plans for all deliverables due by 1 September each year. The Executive Officer may also require Discharger-specific work plans from any Discharger who appears to need a more methodical method of planning for, and implementing the Performance Standards and other requirements of this Order. The work plans shall consider the status of implementation of current year activities and actions of the Dischargers, problems encountered, and proposed solutions, and shall address any comments received from the Executive Officer on the previous year's annual report. The annual report format shall also include clearly defined tasks, responsibilities, and schedule for implementation of Program actions for the annual report due each 1 September. The annual report format should also contain a discussion of the development of new, or modifications of existing BMPs or Performance Standards.
7. The Program's annual report format shall be deemed to be final, incorporated into the Plan, and enforceable under this Order as of 1 July of each year unless determined to be

unacceptable by the Executive Officer. The Dischargers shall address any comments or conditions of acceptability received from the Executive Officer on the Program's annual report format, prior to the submission of their annual report on 1 September, or at an earlier date if so specified by the Executive Officer, at which time the annual report format shall be deemed to be incorporated into the Plan and this Order, unless disapproved of by the Executive Officer.

8. **Monitoring Program:** The Dischargers shall submit, by 1 September of each year, an annual Monitoring Program Plan acceptable to the Executive Officer that supports the development and implementation and demonstrates the effectiveness of their Plan. The Monitoring Program Plan shall be designed to achieve the following objectives:
  - a. Characterization of representative drainage areas and storm water discharges, including land-use characteristics, pollutant concentrations, and mass loading;
  - b. Assessment of existing or potential adverse impacts on beneficial uses caused by pollutants of concern in storm water discharges, including an evaluation of representative receiving waters;
  - c. Identification of potential sources of pollutants of concern found in storm water discharges; and
  - d. Evaluation of effectiveness of representative storm water pollution prevention or control measures.

The Monitoring Program Plan shall include the following:

- a. Provision for conducting and reporting the results of special studies conducted by the Dischargers which are designed to determine effectiveness of BMPs or control measures, define a Performance Standard or assess the adverse impacts of a pollutant or pollutants on beneficial uses.
- b. Provisions for conducting watershed monitoring activities including: identification of major sources of pollutants of concern; evaluation of the effectiveness of control measures and BMPs; and use of physical, chemical and biological parameters and indicators as appropriate.
- c. Identification and justification of representative sampling locations, frequencies and methods, suite of pollutants to be analyzed, analytical methods, and quality assurance procedures. Alternative monitoring methods in place of these (special projects, financial participation in regional, state, or national special projects or research, literature review, visual observations, use of indicator parameters, recognition and reliance on special studies conducted by other programs, etc.) may be proposed with justification. Alternative monitoring methods may include participation in Bay Area Storm water

WASTE DISCHARGE REQUIREMENTS ORDER NO. 5-00-120  
STORM WATER DISCHARGES FROM MUNICIPAL SEPARATE STORM SEWER SYSTEM  
CONTRA COSTA COUNTY CLEAN WATER PROGRAM  
CONTRA COSTA COUNTY

13

Management Agencies Association's Monitoring Program or Projects. The Dischargers shall prepare a plan and conduct a Contra Costa County creek inventory as follows:

- (1) All of the Dischargers shall develop jointly and submit by 1 September 2000 a technical report acceptable to the Executive Officer, on existing creek inventory efforts and a plan to complete the creek inventory project.
- (2) The Dischargers shall submit by 1 September 2000 a complete creek inventory and characterization report acceptable to the Executive. The report shall include environmental indicators as well as other relevant parameters of the creeks.

**9. Discharges to the Waters of the State**

- a. **Non-Storm Water Discharges (Exempted Discharges):** In carrying out Discharge Prohibitions A.1 and A. 2 of this Order, the following non-storm water discharges are not prohibited unless they are identified by the Dischargers or the Executive Officer as sources of pollutants to receiving waters:

- (1) flows from riparian habitats or wetlands;
- (2) diverted stream flows;
- (3) springs;
- (4) rising groundwater; and
- (5) Uncontaminated groundwater infiltration.

If any of the above categories of discharges, or sources of such discharges, are identified as sources of pollutants to receiving waters, then such categories or sources shall be addressed as conditionally exempted discharges in accordance with Provision D.9.b.

- b. **Conditionally Exempted Discharges:** The following non-storm water discharges are not prohibited if they are either identified by the Dischargers or the Executive Officer as not being sources of pollutants to receiving waters or if appropriate control measures to minimize the adverse impacts of such sources are developed and implemented under the Storm water Management Plan in accordance with Provision D.9.c:

- (1) uncontaminated pumped groundwater;
- (2) foundation drains;
- (3) water from crawl space pumps;
- (4) footing drains;
- (5) air conditioning condensate;
- (6) irrigation water;
- (7) landscape irrigation;
- (8) lawn or garden watering;
- (9) planned and unplanned discharges from potable water sources;
- (10) water line and hydrant flushing;

WASTE DISCHARGE REQUIREMENTS ORDER NO. 5-00-120  
STORM WATER DISCHARGES FROM MUNICIPAL SEPARATE STORM SEWER SYSTEM  
CONTRA COSTA COUNTY CLEAN WATER PROGRAM  
CONTRA COSTA COUNTY

14

- (11) individual residential car washing;
  - (12) discharges or flows from emergency fire fighting activities; and
  - (13) dechlorinated swimming pool discharges.
- c. The Dischargers shall identify and describe the categories of discharges listed in D.9.b, which they wish to exempt from Prohibition A.1 in periodic submissions to the Executive Officer. For each category, the Dischargers shall identify and describe as necessary and appropriate to the category either by documentation that the discharges are not sources of pollutants to receiving waters or circumstances in which they are not found to be sources of pollutants to receiving waters. Otherwise, the Dischargers shall describe control measures to reduce pollutants that will eliminate the adverse impacts of such sources, procedures and Performance Standards for their implementation, procedures for notifying the Board of these discharges, and procedures for monitoring and record management. Such submissions shall be incorporated into the Plan unless disapproved by the Executive Officer or acted on in accordance with Provision D.10 and the NPDES permit regulations.
- d. Permit Authorization for Exempted Discharges
- (1) Discharges of non-storm water from sources owned or operated by the Dischargers are authorized and permitted by this Order, if they are in accordance with the conditions of this provision and the Plan.
  - (2) The Board may require dischargers of non-storm water other than the Dischargers to apply for, obtain coverage under an NPDES permit, and comply with the control measures developed by the Dischargers pursuant to Provision D.9. Non-storm water discharges that are in compliance with such control measures may be accepted by the Dischargers and are not subject to Prohibition A.1.
  - (3) The Dischargers may propose, as part of their annual updates to the Plan under Provision D.5 of this Order, additional categories of non-storm water discharges to be included in the exemption to Discharge Prohibition A.1. Such proposals are subject to approval only by modification of this permit.
10. It is anticipated that the Plan may need to be modified, revised, or amended from time to time to respond to changed conditions and to incorporate more effective approaches to pollutant control. Requests for changes may be initiated by the Executive Officer or by the Dischargers. Minor changes may be made with the Executive Officer's approval and will be brought to the Board as information items and the Dischargers and interested parties will be notified accordingly. If proposed changes imply a major revision of the Plan, the Executive Officer shall bring such changes before the Board as permit amendments and notify the Dischargers and interested parties accordingly.

WASTE DISCHARGE REQUIREMENTS ORDER NO. 5-00-120  
STORM WATER DISCHARGES FROM MUNICIPAL SEPARATE STORM SEWER SYSTEM  
CONTRA COSTA COUNTY CLEAN WATER PROGRAM  
CONTRA COSTA COUNTY

15

11. This Order may be modified, or alternatively, revoked or reissued, prior to the expiration date as follows: a) to address significant changed conditions identified in the technical reports required by the Board which were unknown at the time of the issuance of this Order; b) to incorporate applicable requirements of statewide water quality control plans adopted by the State Board or amendments to the Basin Plan approved by the State Water Resources Control Board; or c) to comply with any applicable requirements, guidelines, or regulations issued or approved under Section 402(p) of the CWA, if the requirement, guideline, or regulation so issued or approved contains different conditions or additional requirements not provided for in this Order. The Order as modified or reissued under this paragraph shall also contain any other requirement of the CWA when applicable.
12. The Dischargers shall comply with all applicable items of the "Standard Provisions and Monitoring Requirements for Waste Discharge Requirements (NPDES)," dated 1 March 1991, which are part of this Order. This attachment and its individual paragraphs are referred to as "Standard Provisions."
13. This Order expires on 1 June 2005. The Dischargers must file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of such date as application for reissuance of waste discharge requirements.

I, GARY M. CARLTON, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Central Valley Region, on \_\_\_\_\_.

\_\_\_\_\_  
GARY M. CARLTON, Executive Officer





## INFORMATION SHEET

### CONTRA COSTA CLEAN WATER PROGRAM (PROGRAM)

CITIES OF ANTIOCH, BRENTWOOD AND OAKLEY, CONTRA COSTA COUNTY,  
CONTRA COSTA COUNTY FLOOD CONTROL AND WATER CONSERVATION  
DISTRICT (DISCHARGERS)

#### **Regulatory Background**

The 1972 amendments to the federal Clean Water Act (CWA) prohibited the discharge of any pollutants from a point source into waters of the U.S. unless permitted under the National Pollutant Discharge Elimination System (NPDES). Storm water runoff and urban discharges that occur through discreet conveyance systems are considered point sources subject to NPDES requirements. The 1987 amendments to the CWA mandated the USEPA to publish Regulations establishing permit requirements for storm water discharges associated with industrial activities, and large and medium municipal storm sewer systems that service an urbanized area with a population greater than 100,000. On 16 November 1990, USEPA published these Regulations, which were codified in the Federal Code of Regulations (40 CFR) within Part 122.

The Regulations allow for the issuance of area-wide municipal NPDES storm water permits. This approach allows the Board to designate as a medium or large municipal separate storm sewer system, municipal separate storm sewers within the boundaries of a municipality that are required by the Regulations to obtain storm water permits. This has resulted in many cities throughout California, with populations less than 100,000, or government entities, such as flood control districts or transportation districts, being required to obtain storm water permits.

Under the area-wide approach, the Regulations allow various municipalities and entities to be named as permittees to one NPDES permit. The Regulations recognize the differences between the permittees in regards to its responsibilities for discharges from its municipal storm sewer system, and allows permittees to develop and implement site-specific storm water programs.

The Permit also requires Dischargers to comply with the requirements of the Fourth Edition of the Water Quality Control Plan (Basin Plan) for the Sacramento and San Joaquin River Basins which contains water quality objectives for waters of the Basin.

#### **Contra Costa County Clean Water Program (Program)**

The County encompasses an area of approximately 800 square miles with a total population of approximately 800,000. There are 19 incorporated cities in the County including the newly incorporated City of Oakley. The County is in the jurisdiction of both the San Francisco Bay Regional Water Quality Control Board (SFBRBB) and the Central Valley Regional Water

Quality Control Board (CVRB). The majority of the county and cities are within the SFBRB jurisdiction. The cities of Antioch, Brentwood and Oakley are in the jurisdiction of the CVRB.

All the cities within the CVRB have populations less than 100,000. The SFBRB and the CVRB have determined that the cities are urbanized areas and are subject to storm water regulations. Designation is based on the physical inter-connections between the cities' and County storm sewer systems; the location of each cities' storm water discharges relative to storm water discharges for the County; and the nature of development and urbanization of the cities.

The Contra Costa County, its 19 incorporated cities, and the Contra Costa County Flood Control and Water Conservation District (District) have joined together (collectively named as Dischargers) to form the Contra Costa County Clean Water Program (Program). The Program's objective is to complete an area-wide permit application and to implement a comprehensive Storm Water Management Plan (Plan) to comply with the Regulations. On behalf of the permittees, the Program submitted a report of waste discharge requirements to renew its NPDES area-wide municipal storm water permit and to implement a Storm Water Management Plan (Plan) on 30 June 1998. The application contained all the pertinent information required by the Regulations.

On 21 July 1999, the SFBRB adopted an area-wide NPDES permit, Order No. 99-058 (NPDES No. CAS0029912) for those identified areas of the County under its region. This Order, if adopted by the CVRB, will be an area-wide storm water municipal permit for the portions of the County, District and the Cities of Antioch, Brentwood and Oakley that are under the CVRB region.

### **Storm Water Management Plan (Plan)**

The application included the submittal of a Storm Water Management Plan (Plan) that prescribes specific BMPs or Performance Standards for each Discharger to implement. The Plan is a comprehensive document that provides a schedule for the study of the source and effects of storm water pollution, and control measures to reduce pollutant discharge to surface waters of the State.

The various elements of the Plan describe the group and permittee-specific activities, and addresses implementation and evaluation of the activities in a phased approach over the next 5-year period. The activities include actions in the following areas: Program Management; New Development and Construction Controls; Public Education and Industrial Outreach; Municipal Maintenance Activities; Inspection Activities; Illicit Discharge Control Activities; Monitoring and Special Studies; Watershed Management Activities; and Annual Reporting and Evaluation. Timely and adequate implementation of the Plan should result in the reduction of pollutants discharged in storm water runoff to the maximum extent practicable.

The Program created a Management Committee (MC) to act as the lead in developing and implementing the Plan. The MC formed various subcommittees that work on developing the various elements of the Plan. The MC developed a funding mechanism for the Program through

the assessment of utility fees for storm water. This will ensure that each permittee has adequate funding to implement required BMPs in the Plan throughout the term of the Permit.

The Permit requires that the permittees control the discharge of pollutants in storm water to the Maximum Extent Practicable (MEP). In accordance with the Regulations, implementation of effective Best Management Practices (BMPs) is an acceptable control method to meet MEP.

A key element in the control of pollutants in storm water lies with source identification and characterization of the discharge. This Plan includes an extensive monitoring and loads assessment element, which consists of collecting and evaluating water quality samples and flow data for various watersheds throughout the County. The sampling sites proposed in the Plan were selected based on the land use types in the County. Each year the monitoring data will be analyzed and evaluated to assess its effectiveness in assisting the permittees to determine compliance with the requirements of the Permit. Based on the results of the assessment, the permittees or Board staff may request that the monitoring program be modified or updated to ensure compliance with the Permit.

Annually, the permittees are required to evaluate the overall effectiveness of its Plan. The annual report will include assessment activities, quantitative analysis based on sampling results from the monitoring data, and qualitative analysis based on indirect measures, such as level of efforts. Qualitative analysis will be used throughout the early stages of the Permit to evaluate the nonstructural or non-conventional BMPs. Upon completion of the evaluation assessment, the permittees or Board staff may request modifications to the Plan.

### **Permit Compliance Activities**

1. **Discharge Prohibition A.1 and A.2:** These prohibitions reflect the CWA Section 402(p) requirement to effectively prohibit non-storm water discharges to storm sewers. This means that non-storm water discharges shall be specifically regulated by an NPDES permit or that the discharge is not considered waste or does not contain constituents of concern, in which case an NPDES permit would not be required.
2. **Effluent Limitations:** The Dischargers shall reduce or eliminate the discharge of pollutants from municipal separate storm sewers to the maximum extent practicable. Discharges of pollutants in non-storm water discharges that cannot be eliminated shall be reduced or minimized through the implementation of Best Available Technologies Economically Achievable for toxic and non-conventional pollutants, and Best Conventional Control Technologies for conventional pollutants.
3. **Receiving Water Limitation C.1 and C.2:** The receiving water limitations are site-specific interpretations of the water quality objectives from applicable water control plan. As such they are required as part of the permit. However, a receiving water condition not in conformance with the limitation is not necessarily a violation of this Order. The Board may require an investigation to determine cause and culpability prior to asserting a violation has occurred.

4. **Provision D.1:** This provision states that the Dischargers are expected to demonstrate compliance with Discharge Prohibition A.2 and Receiving Water Limitations C.1 and C.2 through the timely implementation of control measures, management practices, and other actions to reduce pollutants in discharges in accordance with their Plan. If the Board or Dischargers determine that the discharges are causing or contributing to an exceedance of an applicable water quality objectives, the Dischargers need to submit a report describing what BMPs are currently being implemented and what additional BMPs will be implemented to reduce the pollutants that are causing or contributing to the exceedance of water quality objectives. Preparation, implementation, and iterative improvement of an effective Plan are thus, the essential means of achieving and evaluating compliance.
5. **Provision D.2:** This Provision requires the Dischargers to submit technical report(s) on the exceedance of WQOs for mercury, unknown toxicity, diazinon, chlorpyrifos, Group A pesticides <sup>1</sup>, and DDT in the Delta waterways. This provision is a narrative water quality-based effluent limitation that will ensure that the storm water discharges do not cause or contribute to impairment of these water bodies.
6. **Provision D.3 and D.4:** These provisions require the implementation of the Dischargers' Plan and Performance Standards and essentially incorporate the Plan, including the Performance Standards, into the permit, thus making its implementation enforceable. It also establishes, in conjunction with Provision D.1, the Plan and Performance Standards as the focal points of the permit. As such, the Plan, including the Performance Standards, is considered a living document that will change and improve with time to effectively reduce pollutant discharges to the maximum extent practicable. Specifically, all other plans required by the permit are expected to be incorporated into the Plan.
7. **Provision D.5 through D.7:** These provisions require submittal of an annual report and an annual report format. The information required in the annual report and annual report format is equivalent to that required in storm water regulations pursuant to 40 CFR 122.41(I) and the Basin Plan. The elements of the annual reports and annual report formats will ensure that programs and performance standards are developed and implemented and will allow evaluation of compliance with permit conditions. The annual report also provides a focus to review, update or revise the Plan on an annual basis. Provision D.5 establishes a process for submittal of an annual report format as part of the annual report requirement.
8. **Provision D.8:** This provision requires the annual submittal and implementation of a Monitoring Program Plan in accordance with 40 CFR Parts 122.44(I) and 122.48 which demonstrates the effectiveness of the Plan and accordingly, demonstrates compliance with the conditions of the permit. Rather than requiring specific types, locations, and frequencies of monitoring activities, this provision establishes objectives for implementing

---

<sup>1</sup> Group A pesticides are: aldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, hexachlorocyclohexane (including lindane), endosulfan, and toxapheneldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, hexachlorocyclohexane (including lindane), endosulfan, and toxaphene.

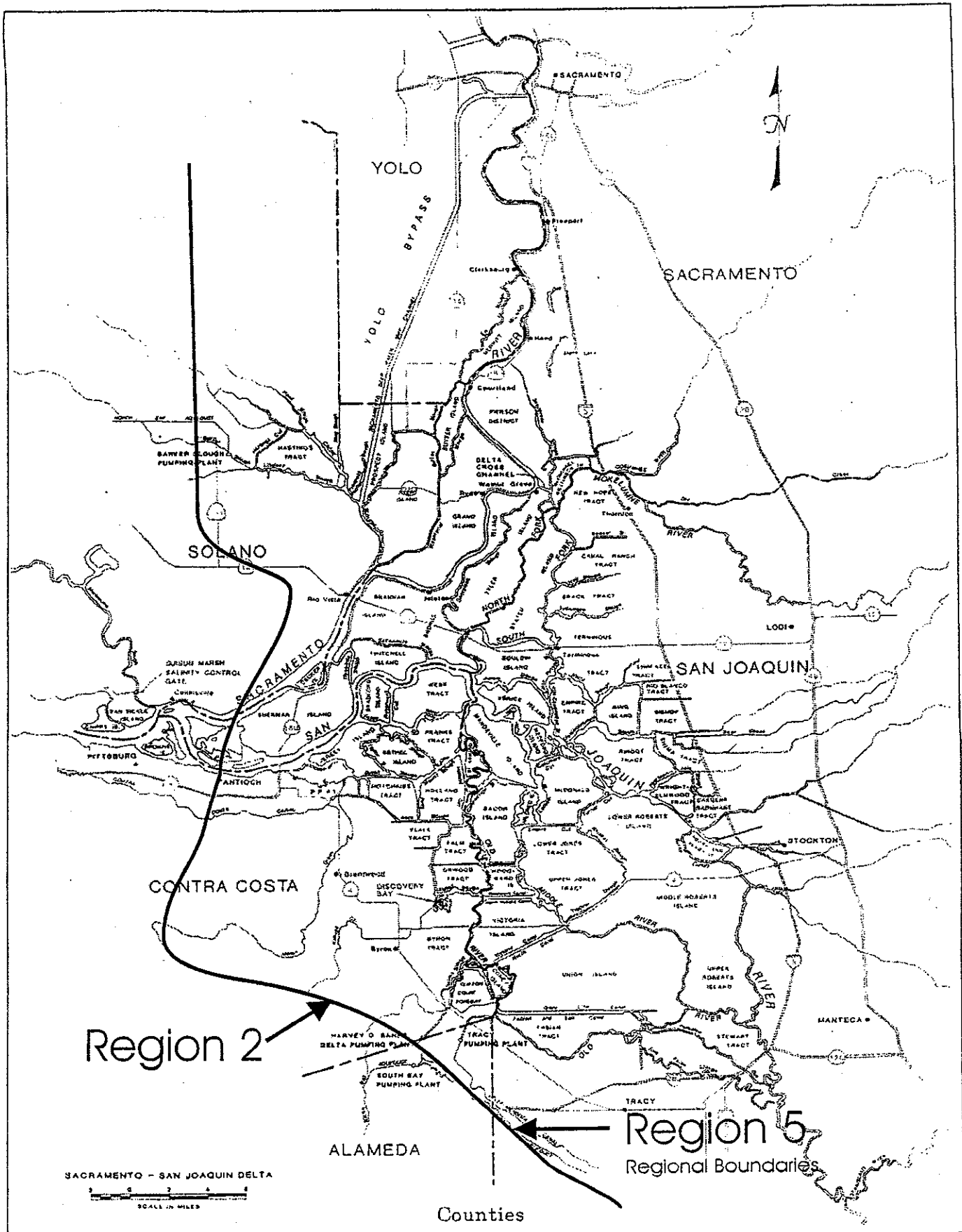
the Monitoring Program Plan. This is intended to provide flexibility and efficiency in determining specific monitoring activities while establishing a basis for determining effectiveness of monitoring activities.

9. **Provision D.8:** This provision establishes a time schedule for the Dischargers to plan and conduct jointly, a complete creek inventory and characterization of creeks in Contra Costa County.
10. **Provision D.9:** This provision requires identification of discharges of the non-prohibited types that the Dischargers wish to exempt from Prohibition A.1. For conditionally exempted discharges which are pollutant sources, the Dischargers shall identify and incorporate into the Plan control measures to minimize the adverse impact of such sources. This provision also establishes a mechanism to authorize under the permit non-storm water discharges owned or operated by the Dischargers.
11. **Provision D.10 and D.11:** The permit conditions have been designed to allow maximum flexibility in developing and implementing programs. The permit conditions may need to be modified as new information is developed and the permit programs mature to address changed conditions. Modifications to the permit will be made pursuant to 40 CFR Parts 122.62, 122.63, and 124.5.
12. **Provision D.13:** Standard provisions are based on 40 CFR Part 122.41. They include a duty to comply with the conditions of the permit, a duty to provide information, inspection rights by the Board, signatory requirements, certification of documents, reporting requirements, and penalties for violation of permit conditions.

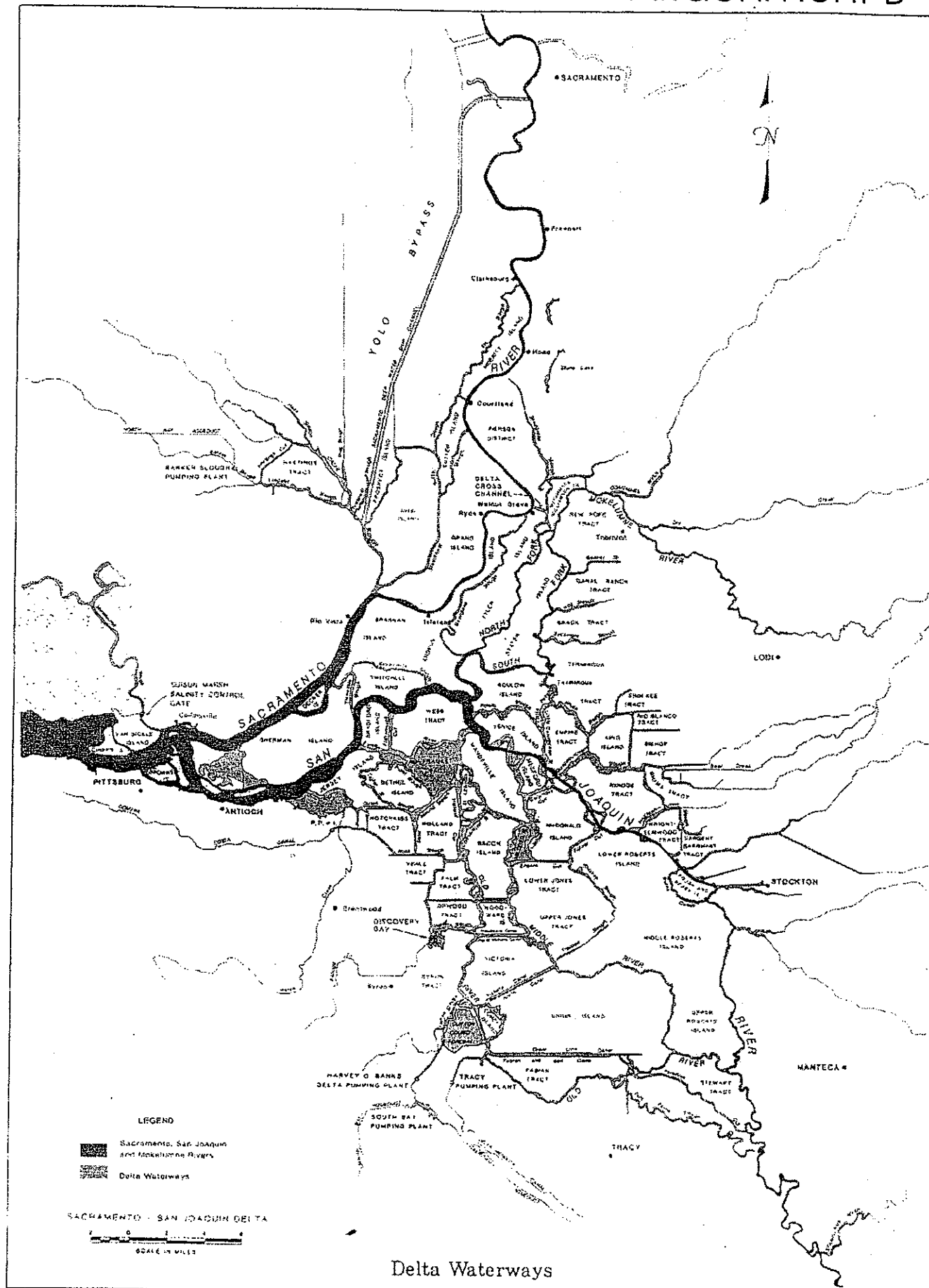
*LSS (10 February 2000)*



# Attachment A



# Attachment B





This report is being submitted by the participating agencies  
of the Contra Costa Clean Water Program



City of Antioch  
City of Brentwood  
City of Clayton  
City of Concord  
Town of Danville  
City of El Cerrito

City of Hercules  
City of Lafayette  
City of Martinez  
Town of Moraga  
City of Orinda  
City of Pinole

City of Pittsburg  
City of Pleasant Hill  
City of Richmond  
City of San Pablo  
City of San Ramon  
City of Walnut Creek

County of Contra Costa  
Contra Costa County Flood Control & Water Conservation District

---

Gratefully acknowledge the work  
of the Permit Reissuance Committee:

Joe Brandt, Chairperson  
Todd Teachout, Vice-chairperson  
Pat MacDonald  
Rinta Perkins  
Scott Christie  
Tom Williams  
Mike Hollingsworth

City of Antioch  
City of Pleasant Hill  
City of Concord  
City of Concord  
City of San Pablo  
Contra Costa County  
Flood Control District

Report Prepared by the Staff of the  
Contra Costa Clean Water Program

Donald P. Freitas  
Sharon Leavens  
Ephraim Leon-Guerrero  
Tom Dalziel  
Linus Farias  
Linda Martinez

## TABLE OF CONTENTS

---

	PAGE
Acknowledgements .....	ii
Table of Contents .....	iii
List of Figures/Tables .....	iv
Acronyms .....	v
Section 1 – Introduction .....	1 – 1
Section 2 – Program Management .....	2 – 2
Section 3 – New Development and Construction Controls .....	3 - 1
Section 4 - Public Education and Industrial Outreach .....	4 - 1
Section 5 - Municipal Maintenance .....	5 – 1
Section 6 – Inspection Activities .....	6- 1
Section 7 – Illicit Discharge Control Activities ..	7 -1
Section 8 – Monitoring and Special Studies .....	8 - 1
Section 9 – Watershed Management Activities .....	9 – 1
Appendices	